

**Notice of Allowability**

Application No.

10/718,184

Examiner

Ted Kim

Applicant(s)

LEHTINEN, JEFFREY R.

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09/07/2007.
2. ☒ The allowed claim(s) is/are 1,3-5,9-19,21,22 and 24-26.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance             |
|  | 9. <input type="checkbox"/> Other _____   |

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Christopher Hunter on September 12, 2007.

The application has been amended as follows:

#### CLAIMS

- Claim 11, line 1, "8" has been replaced by – 1 –.
- Claim 24, line 1, "23" has been replaced by – 22 –.

For claim 5 presented previously on 08/21/2007, the typographical problems appear to be a possible transmission problem, and these have been resolved by the replacement original claim 5 submitted on 09/07/2007

Application Serial No. 10/718,184  
Response to Office Action dated July 17, 2007  
Amendment dated August 21, 2007

4 enveloping a contoured deformable fuel feed, fixedly attached at one end thereof to a  
5 housing inlet and having a nozzle tip adapter assembly operatively connected therewith at  
6 another end, attached at a housing outlet end, said fuel feed being otherwise separated  
7 from said housing by a peripheral insulating space wherein the improvement comprises:  
8 a. said housing outlet end having a first contoured surface portion; and  
9 b. said nozzle assembly including a movable nozzle spray-tip having a second  
10 contoured surface portion in complementary mating engagement with said housing first  
11 contoured surface portion, resulting in relative motion therebetween upon the operation  
12 of said gas turbine engine, as a result of the thermal expansion differential arising due to  
13 the differing temperatures of said housing and said fuel feed, wherein said first and  
14 second contoured surface portions are exterior and interior surfaces, respectively, and  
15 wherein each of said contoured surface portions includes at least a portion of a spherical  
16 surface component.

1 4. (currently amended) The improved fuel injector assembly of claim 2 1, wherein  
2 said contoured surface portions are curved.

1 5. (original) The improved fuel injector assembly of claim 8, wherein said  
2 contoured surface portions are curved.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Ted Kim whose telephone number is 571-272-4829. The Examiner can be reached on regular business hours before 5:00 pm, Monday to Thursday and every other Friday.

The fax number for the organization where this application is assigned is 571-273-8300.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg, can be reached at 571-272-4828. Alternate inquiries to Technology Center 3700 can be made via 571-272-3700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). General inquiries can also be directed to the Patents Assistance Center whose telephone number is 800-786-9199. Furthermore, a variety of online resources are available at <http://www.uspto.gov/main/patents.htm>

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September 12, 2007	Fax (After Final)	571-273-8300
Technology Center 3700	Telephone	571-272-3700

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# REPLACEMENT SHEET

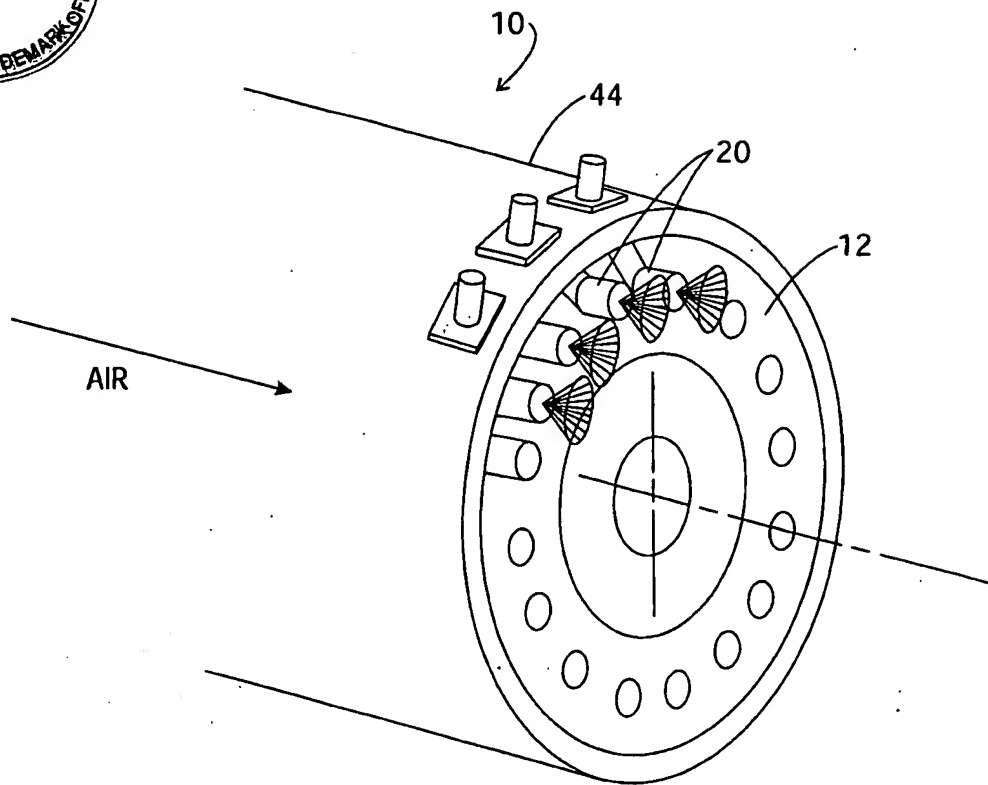


FIG. 1

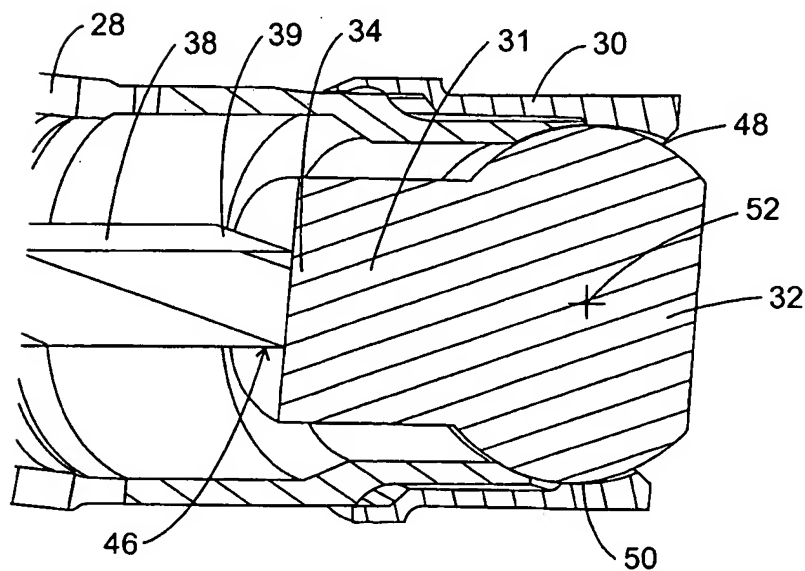


FIG. 3

5 Sheets of  
Replacement  
drawings  
approved  
AK  
4/12/07

REPLACEMENT SHEET

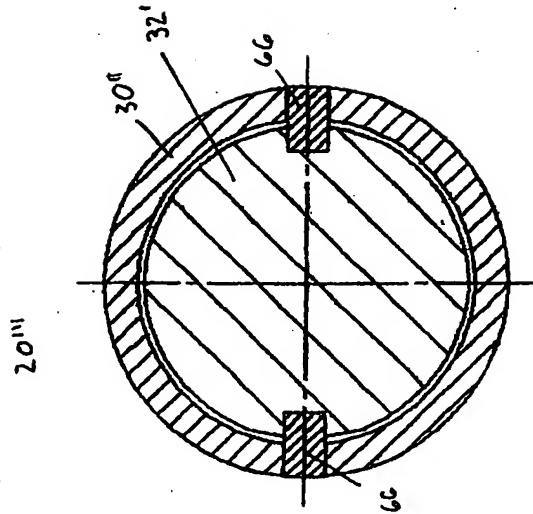


FIG. 7B

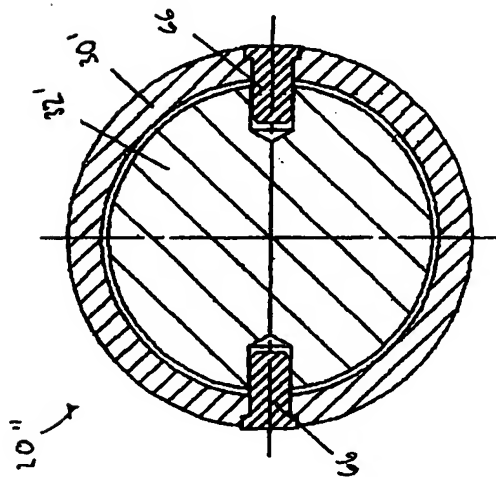


FIG. 7A

ENTRY APPROVED

TX

9/12/07